

液压式履带起重机

HYDRAULIC CRAWLER CRANE

QUY90

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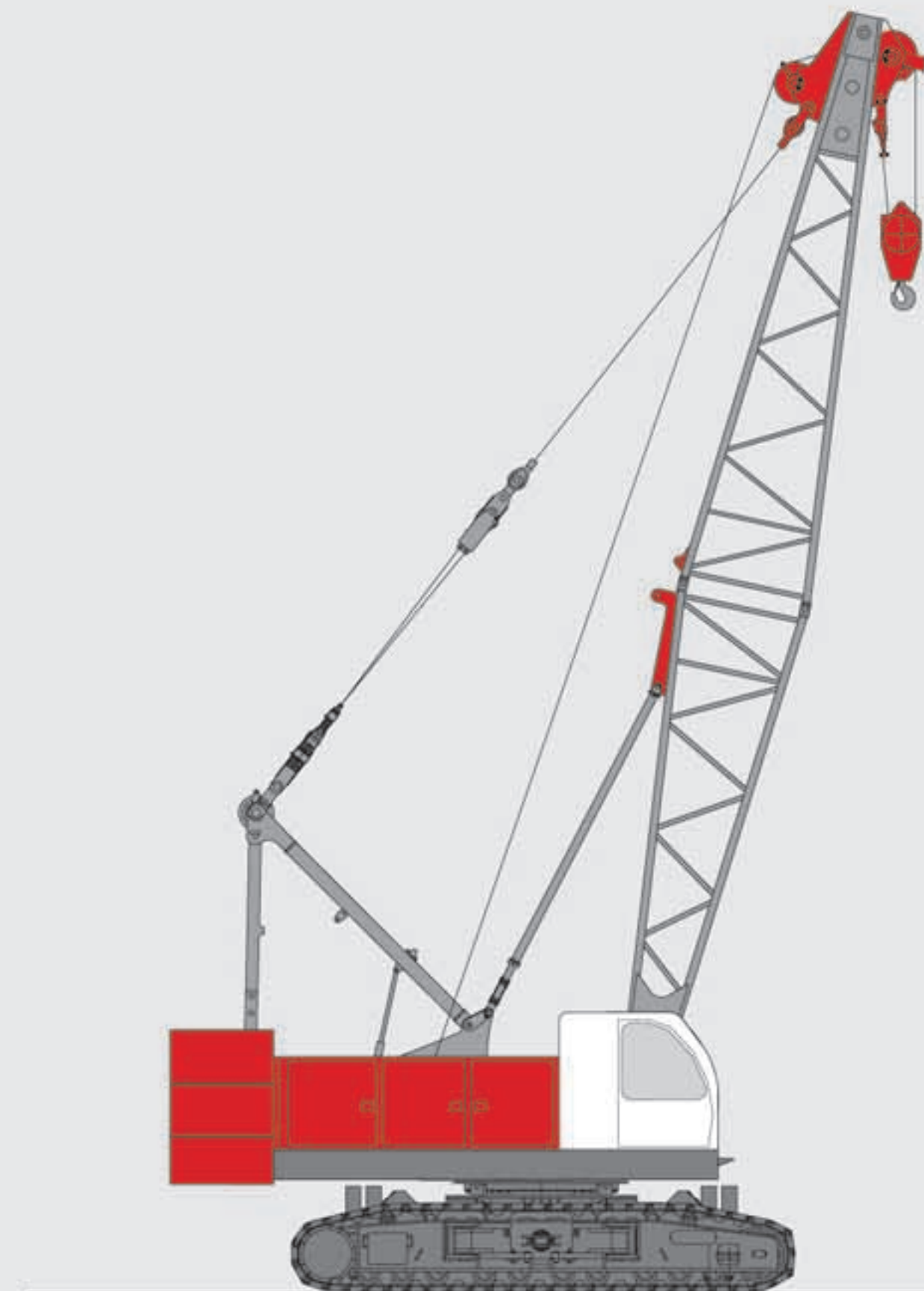
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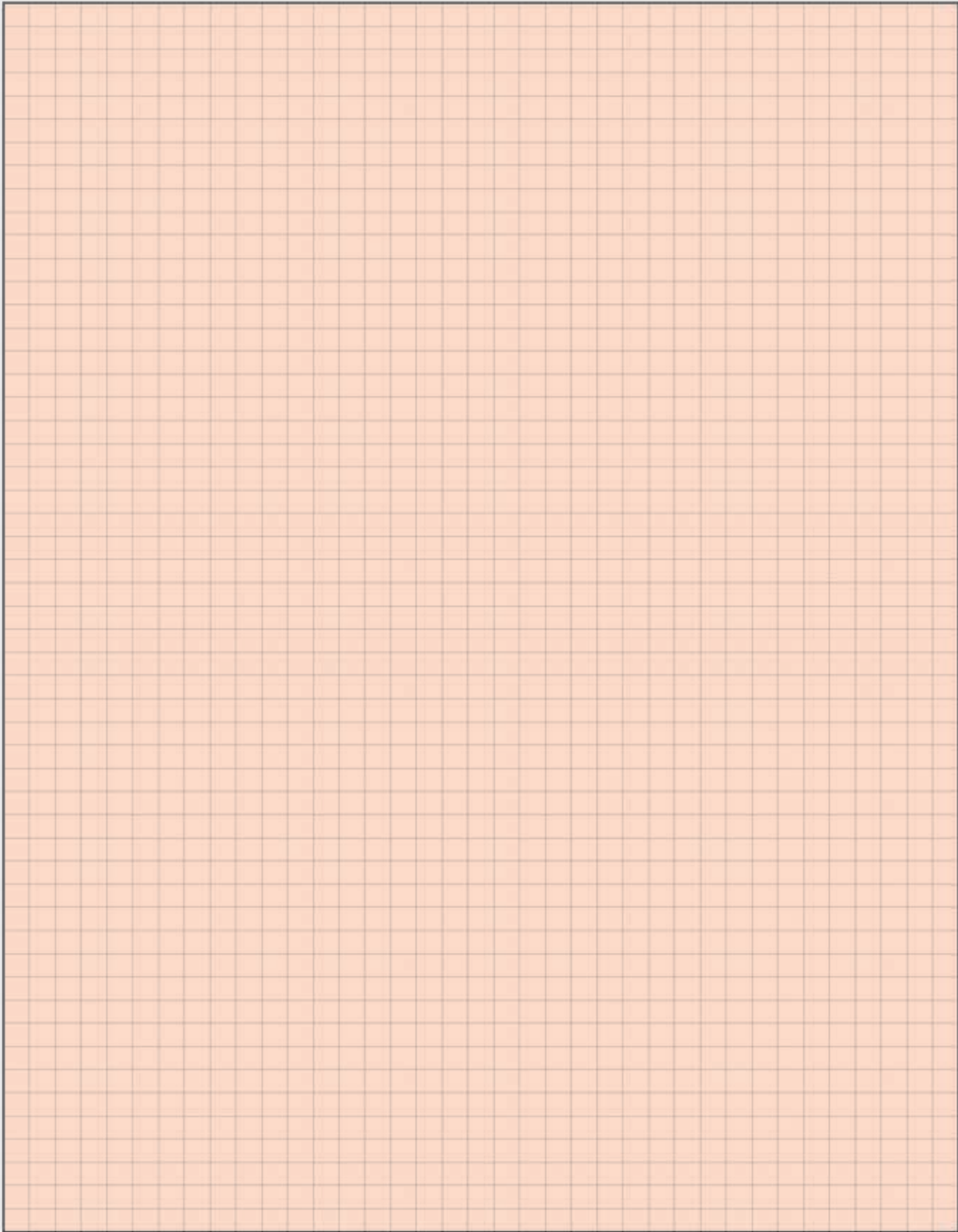
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技术参数如有更改恕不另行通知

Specifications may vary without prior notice





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安全装置

吊钩和臂架防过卷装置

吊钩和臂架防过卷装置是用于防止因过卷导致的机器损坏或后翻事故。

吊钩防过卷装置

当起重钩提升到一定高度时,将重锤托起,则微动开关由弹簧复位,开关接点断开,控制继电器动作使蜂鸣器报警,报警指示灯闪亮,同时,控制器锁定起重钩的提升,起重钩提升动作自动停止。

臂架防过卷装置

臂架后设有防倾杆,主臂上限角度由力矩限制器和主臂上限位开关检测控制。当主臂 $\geq$ 上限位角度 80° 时,力矩限制器声光连续报警,并输出信号。主臂停止升臂。同时,主臂上限位开关动作,主臂上限位开关回路被切断,主臂停止升臂。

力矩限制器

限制器对起重机作业进行实时监控,当车运输或者工作的时候由限制器来测试各种参数再由显示器反映给驾驶员。在各种工况下,通过按键设置工况参数。

当额定起重力矩的 $0\% \leq$ 起重力矩 $<$ 额定起重力矩的 90% 时,力矩限制器显示屏上,力矩百分比条形码绿色点亮,限制器无声音报警。

当额定起重力矩的 $90\% \leq$ 起重力矩 $<$ 额定起重力矩的 100% 时,力矩限制器显示屏上,力矩百分比条形码黄色预警,同时限制器发出声音断续报警。

当额定起重力矩的 $100\% \leq$ 起重力矩 $<$ 额定起重力矩的 105% 时,力矩限制器显示屏上,力矩百分比条形码红色报警,同时限制器发出声音连续报警。

当起重力矩 $\geq$ 额定起重力矩的 105% 时,力矩限制器显示屏上,力矩百分比条形码红色报警,限制器发出声音连续报警,同时输出信号。主、副钩停止提升,臂停止增幅动作。

负载率指示灯

为了便于现场人员了解机械载荷情况,采用了与交通信号相同的3色负载率指示灯。同时配备了司机与吊装指挥人员联系用的对讲机。

风速仪

风速仪-臂架顶部的风速传感器装置用于检测风速,力矩限制器显示风速。通过对风速的测试来给驾驶员一个参考,进而能确定车的工作环境。

制动器和锁定装置

制动器 本起重机设有主、副卷筒制动器、主、副变幅卷筒制动器,回转制动器。

锁定装置 本起重机设有主、副卷筒棘爪锁定装置、主变幅卷筒棘爪锁定装置、回转锁定装置。

拉力传感器、角度传感器

拉板上设有拉力传感器,用于检测拉力。
主臂根部装有角度传感器,用于检测主臂的角度。

水平仪

该装置用于检测机体与水平地面的角度,用来保证机器工作地面符合要求。

角度盘

主臂架根处设有机械式角度盘,在吊运和提升的时候用来显示臂架当前角度,给驾驶员一个详细的参考。

防倾杆限位保护

基础臂节设有防倾杆,作用是在提升和吊运的情况下,如果重物的质量很大而且在不定风速的情况下,很有可能使主臂往后过倾。这个装置避免了此类情况的发生。

回转报警

回转机构设有蜂鸣器,当上车回转时,这个装置会自动发出声音断续报警,可按回转静音解除报警。

Safety Device

Hook and boom over-hoist prevention devices

Hook and boom over-hoist prevention devices are used for preventing the crane from the accidents because of the over-hoist.

Hook over-hoist prevention device

When the hook lifts up to certain height and touches the plumb, the limit switch shall be disengaged by the reposition spring, and then the switch cuts off the control circuit. The control relay makes the buzzer alarm and the indicator lights up. At the same time, the rise of the hook will stop automatically.

Boom over-hoist prevention device

The boom upper limit angle is controlled by moment limiter and boom upper limit switch. When the boom upper limit angle is more than 80° , the moment limiter will continuously alarm and send out the signal. The rise of boom will stop. At the same time, the limit switch is cut off. The boom stops rising.

Moment limiter

The device monitors the work of the crane. You can press the key to set the parameters of all working conditions. When the actual load is less than 90% of rated load, the screen shows load proportional bar in green color, and no warning alarm from the safe load indicator. When the actual load exceeds 90% of rated load while is less than 100% of rated load, the screen shows yellow color and an intermittent warning alarm sounds. When the actual load exceeds 100% of rated load while less than 105% of rated load, the monitor screen shows red color and the safe load indicator gives continuous warning alarm, and output control signal. When the actual load exceeds 105% of rated load, the monitor screen shows red color and gives out a continuous warning alarm, at the same time the safe load indicator put out control signal to stop the hoisting action of main and auxiliary hooks and boom.

Three-color load indicator

The three-color load indicator is installed on the crane in order to inform the personnel on site of the current situation. The driver and the signal personnel are equipped with the interphone for the convenience of contact.

Anemometer

Anemometer- the wind speed sensor is installed on the top of boom to test wind speed. The moment limiter displays wind speed. The driver can specify the working environment referring to the test of wind speed.

The brakes and locking devices

Brakes: the brakes on the main and aux. drums, the brakes on the main and aux. derricking drums, slewing brake. Locking devices: main and auxiliary winch pawls, main derricking drum pawls and slew locking device.

Pull sensor, angle sensor

The pull sensor is installed on the pendant bar to test the pull. The angle sensor is installed on the boom foot to test boom angle.

Gradiometer

The device is used for testing the angle between the machine and the ground to ensure the conditions of the ground meet the requirements.

Angle scale

The angle scale is installed on the boom foot to show the current angle of boom when the crane is lifting the load.

Limit protection of back stop

The back stop is installed on the boom foot to prevent the tipping-over of the boom due to the heavy load and uncertain wind speed.

Swing alarm

The buzzer is installed on the swing device. The buzzer may sound continuously when the boom derricking reaches limit position.



详细说明

上车结构

动力装置	钢丝绳直径 ϕ 26mm
型号 QSL-9进口康明斯电控柴油机。	钢丝绳长度 260m
类型 水冷式，直喷，带涡轮增压器。	最大绳速 112m
排量 8.9L	
额定功率 209kw/1800rpm	
最大扭矩 1300N.m/1400rpm	
燃油油箱容量 400L	
液压油箱容积 570L	

液压系统	主臂变幅系统
发动机在采用变量双主泵（带伺服泵）+回转泵+变量泵+冷却泵，一组M7-LUDV多路阀，该系统具有泵控系统的永远全工作范围控制的精密控制（优于阀控），同时能实现行走、变幅、回转和卷扬复合动作时的组合。油冷却器独立温控散热，回转独立闭式控制，各卷扬独立系统控制。	由液压变量柱塞马达通过行星减速机驱动。湿式片式常闭制动器。

电子监控系统	回转系统
电子监控器适时显示并具有故障查询功能，CAN-BUS总线控制。	由2个马达通过行星减速机带动齿轮驱动，可旋转360°

主、副提升卷扬装置	速度
主、副提升卷扬装置，由变量柱塞马达通过行星减速机驱动。湿式片式常闭制动器。	0-2.1转/分钟

主提升卷扬装置	四个位置止动销锁定。
卷筒 节圆直径 ϕ 610mm	
钢丝绳直径 ϕ 26mm	
钢丝绳长度 220m	
最大绳速 112m	

副提升卷扬装置	驾驶室
卷筒 节圆直径 ϕ 610mm	司机室与机罩外表面都是烤漆。宽度920mm，前窗采用大弧形面，视野好。带有空调和暖风机，雨刷器、车载VCD系统。大屏幕电子监控器和力矩限制器，采用LED显示器显示风速，可调座椅等。还有采用了扶手椅式控制手柄，十字控制，能够以舒适的姿势进行操作。配置了空调装置，使司机能够在舒适的环境下工作。

下车结构

底座	履带动力
用高强度板焊接X型框架结构，与履带架采用插入式连接。便于快速安装和拆卸。它们的特点是外形美观；抗扭抗弯性能好。	独立的液压驱动系统嵌入履带架内。每侧液压驱动系统包含了一个液压马达并通过行星减速机带动驱动轮。液压马达和减速机嵌入履带结构内，不超出履带宽度。
支重轮装置	行走速度
每侧各有10个，所有的支重轮均装有铜套和浮动式密封以及耐磨润滑油。	0、9/1.4千米/小时
下机架支撑油缸装置	爬坡能力
四个液压顶升油缸连接在下机架的支撑梁上进行伸/缩动作	30%（17°）
履带板	
左、右履带行走装置共有108块履带板，每块履带板的宽度为860mm。履带板的张紧程度可以通过液压千斤顶进行调节，调节垫片的位置达到理想的张紧度。	

作业装置

臂架主铰管采用进口高强管，变幅装置采用钢压扣钢丝绳；大大提高了有效载荷。
主臂
臂架为中间等截面，两端变截面的空间桁架式结构，钢管焊接。标准臂从13—61米。

塔式工况组合
塔臂与主臂组合，主臂有三种角度：86°、76°66°；主臂长度从25.8米—43.8米。
塔臂角度从15°—70°，塔臂长度从21米—39米。主臂+塔臂的最大长度为45.8米+39米。
吊钩
90吨吊钩 50吨吊钩 30吨吊钩 11吨吊钩

Specifications

Superstructure

Power device	Aux. winch
Model: QSL—9 diesel engine imported from Cummins	Drum: the diameter ϕ 610mm
Type: Water-cooled, direct fuel injection with turbocharger actuator	The diameter of wire rope: ϕ 26mm
Displacement: 8.9L	Length of wire rope: 260m
Rated power: 209kw/1800 rpm	Maximum rope speed: 112m/min
Maximum torque: 1300N.m/1400rpm	Boom derricking system
Capacity of fuel tank: 400L	The main and auxiliary winches are driven by the hydraulic variable plunger motors through the planetary reduction gear. The wet-disc brake is often engaged.
Capacity of hydraulic oil tank: 570L	Drum: the diameter ϕ 440mm
Hydraulic system: The system adopts double variable displacement main pumps (with servo pump), swing pump, variable displacement pump, cooling pump and a group of M7-LUDV multi-circuit valves. The pump control system is superior to valve control system. The system can realize simultaneous operations: travel, derricking, swing and hoisting. The oil cooler independently controls the temperature. Swing is closed-controlled independently. All winches are controlled independently.	The diameter of wire rope: ϕ 20mm
	Length of wire rope: 170m
	Maximum rope speed: 55m/min
	Swing system
	The swing system provides 360° rotation. The swing unit is driven by two hydraulic motors through planetary reduction gear.
	Swing speed: 0~2.1r/min
	Swing lock: four position lock
	The cabin
	The outside of cabin is painted well. The width of the cabin is 920mm. The front window is inclined and the posts are designed with the cross section with high strength. There are air-conditioner, heater, rear view mirror, wiper, stereos and fire extinguisher in the cabin. The electronic monitor and moment limiter with large screen are in the cabin. The seat can be adjusted.
	Counterweight
	The tray of counterweight adopts welding structure. Its weight is 1.5t. There are three pieces of counterweight which is made of cast iron. The total weight is 26.2t. The counterweight can be suspended for the convenience of assembly and dismantling.

Undercarriage

Lower frame	Track roller
X-type structure welded with steel plate which has high strength. The Lower frame connects side frames with drive pins for convenience of installation and disassembly. It has features: beautiful appearance and good torsion-resistance.	Each side has 10 track rollers track rollers are equipped with bushings, seals and lubricating oil.
Jack-up cylinders	Track shoe
The four hydraulic jack-up cylinders are connected with the beam.	The left and right crawlers have 108 track shoes. The width of the track shoe is 860mm. The tension state of track shoe can be adjusted by the hydraulic jack until the adjusting plate reaches the ideal position.
	Crawler drive
	Independent hydraulic propel drive is built into each crawler side frame. Each drive consists of a hydraulic motor propelling a drive sprocket through a planetary reduction gear. Hydraulic motor and reduction gear are built into the crawler side frame within the shoe width.
	Travel speed
	0.9/1.4km/h
	Grade ability
	30%（17°）

Working Equipments

The main steel pipe with high strength is imported; the derricking device adopts wire rope with the clamp to improve the efficiency.
Boom
The insert section has the equal cross section. The top and the foot have the variable cross sections. The boom is the lattice structure welded with steel pipes, standard boom: 13-61m.
Luffing jib combination
Luffing jib and boom combination: boom angle has three kinds: 86°, 76°66°; boom length is from 25.8m~43.8m.
Luffing jib angle is from 15° to 70°. Length of luffing jib is from 21m to 39m. Maximum length of boom and luffing jib: 45.8m+39m.
Hook block
90T Hook block 50T Hook block
30T Hook block 11T Hook block

工况符号

The symbols of working conditions



标准主臂工况
Standard Boom



加长主臂工况
Runner



塔式工况
Luffing jib



臂杆组合

Boom Combination

标准主臂

最大起重量: 90吨x4米
最大臂杆长度: 61米

Standard Boom

Max. Lifting capacity:
90t x 4m
Max. Boom length:
61m

加长主臂

最大起重量: 9吨x20米
最大臂杆长度: 61米

Runner

Max. Lifting capacity:
90t x 20m
Max. Boom length:
61m

塔式工况

最大起重量: 18.4吨x12米
最大组合: 43.8米+39米

Fixed Fly Jib

Max. Lifting capacity:
18.4t x 12m
Max. Combination:
43.8m + 39m



主臂 Boom
13m-61m



主臂 Boom
13m-61m



主臂 Boom 塔臂 Luffing jib
25.8m-43.8m 21m-39m

主要技术参数

Technical Data

项 目	单 位	数 值
主臂最大额定起重量	t	90
标准主臂长度	m	13—61
塔式工况主臂长	m	25.8—43.8
塔式工况塔臂长	m	21—39
吊钩配置	t	90/50/30/11
工作速度	钢绳速度	提升 m/min *高速112/56 低速78/39
		下降 m/min *高速112/56 低速78/39
		起重臂上升 m/min *55
		起重臂下降 m/min 55
	回转速度 r/min 0—2.1	
	行走速度 km/h *0.9—1.4	
主提升倍率	10	单绳拉力 13t
爬坡能力 (带基本臂, 司机室置于后方)	%	30
柴油机额定输出功率/转速	KW/rpm	美国康明斯QSL-9 209/1800
整机质量 (带基本臂)	t	88
接地压力 (带基本臂)	Mpa	0.087
配重质量	t	26.2

注: *带速度是随载荷的不同而变化。

Descriptions	Unit	Value
Max. Lifting Capacity	t	90
Length of standard boom	m	13—61
Boom Length when mounted with luffing jib	m	25.8—43.8
Length of luffing Jib	m	21—39
Kinds of hook block	m	90/50/30/11
Working speed	Line Speed	Hoist m/min * High 112/56 Low 78/39
		Lower m/min * High 112/56 Low 78/39
		Boom hoist m/min * 55
		Boom Lower m/min 55
	Slew speed r/min 0—2.1	
	Travel speed km/h *0.9—1.4	
Parts of line	10	Single pull 13t
Grade ability (with basic boom and cabin on rear side)	%	30
Rated power output/rotating speed of diesel engine	KW/rpm	Cummins QSL-9 209/1800
Mass of the crane (with basic boom)	t	88
Ground pressure (with basic boom)	Mpa	0.087
Counterweight	t	26.2

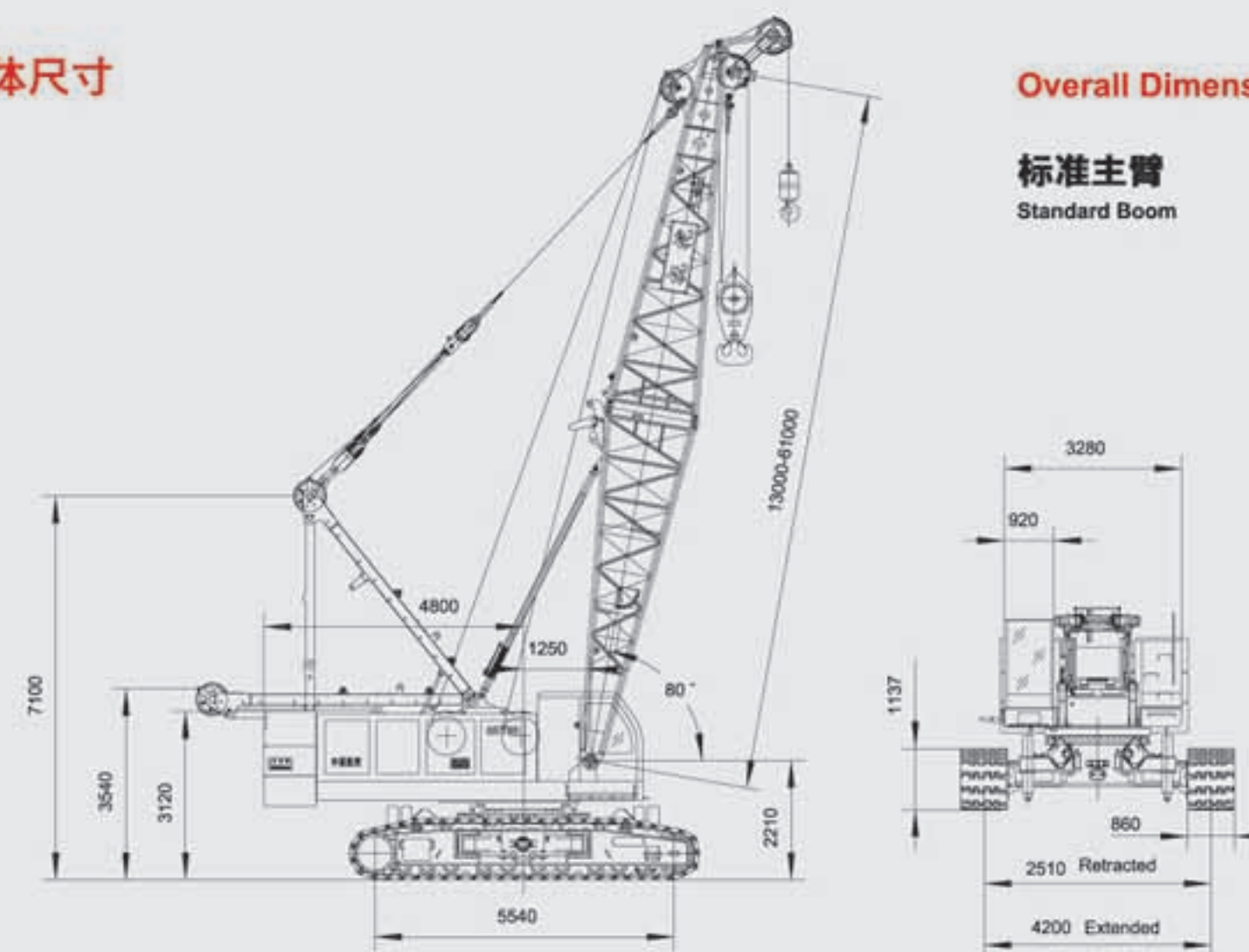
Note: Speed with * may vary with the different load.

总体尺寸

Overall Dimensions

标准主臂

Standard Boom

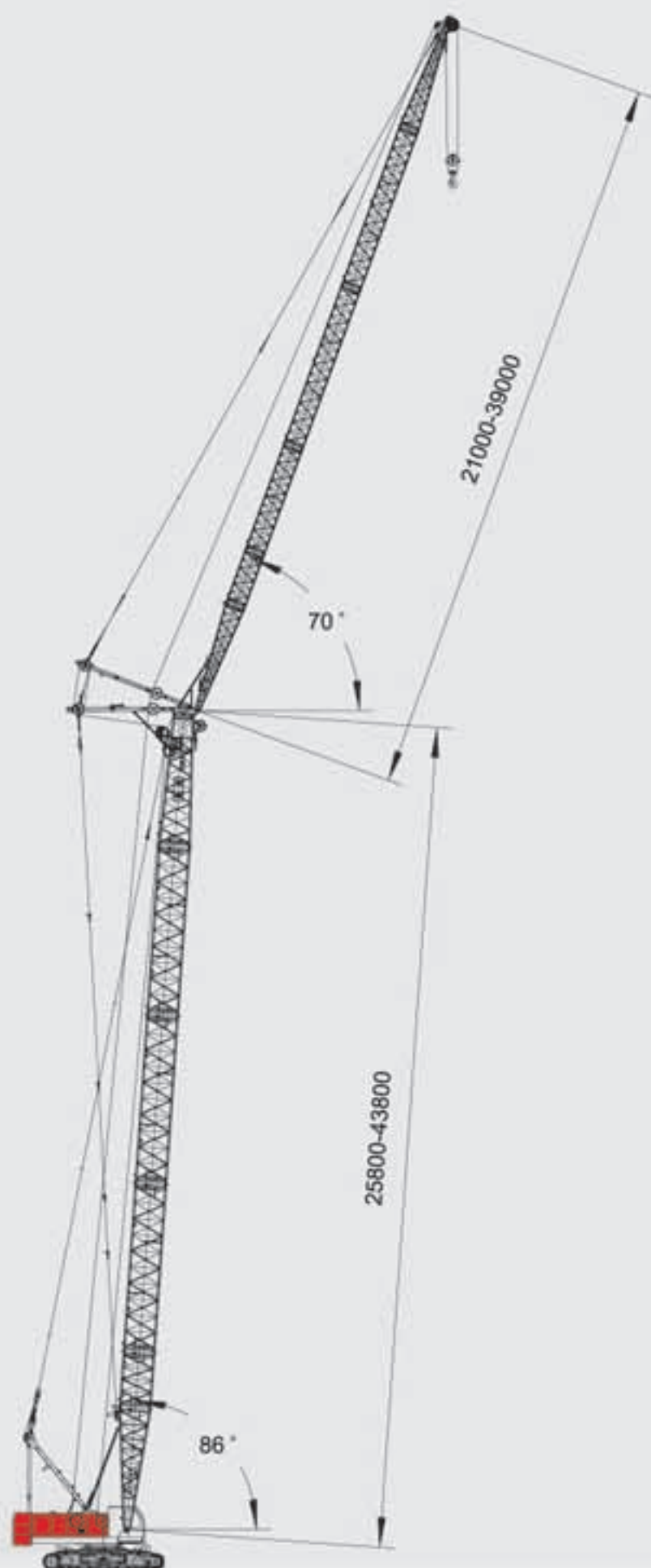




总体尺寸

Overall Dimensions

塔式工况 Luffing jib



主臂和副臂组合

Main Boom and Jib Combinations

标准主臂工况臂节组合

Boom Combination

13m	
16m	
19m	
22m	
25m	
28m	
31m	
34m	
37m	
40m	
43m	
46m	
49m	
52m	
55m	
58m	
61m	

注解

符号	臂杆长度	备注
	6.5米	6.5米基础臂节
	6.5米	6.5米顶部臂节
	3米	3米臂节
	6米	6米臂节
	9米	9米臂节
	12米	12米臂节

Note

Symbol	Boom length	Remarks
	6.5m	8m Boom foot
	6.5m	8m Boom top
	3m	3m section
	6m	6m section
	9m	9m section
	12m	12m section

塔式工况主臂臂节组合

Boom combination

25.8m	
28.8m	
31.8m	
34.8m	
37.8m	
40.8m	
43.8m	

注解

符号	臂杆长度	备注
	0.3米	0.3米臂头
	3米	3米中间臂节
	6.5米	6.5米基础臂
	6米	6米中间臂节
	9米	9米中间臂节
	7米	7米过度臂节

Note

Symbol	Boom length	Remarks
	0.3m	0.3m boom top
	3m	3m boom insert
	6.5m	6.5m boom foot
	6m	6m boom insert
	9m	9m boom insert
	7m	7m tapered section

塔式工况副臂臂节组合

Luffing jib combination

21m	
24m	
27m	
30m	
33m	
36m	
39m	

注解

符号	臂杆长度	备注
	6米	塔臂基础臂
	6米	塔臂顶部臂节
	3米	塔臂3米臂节
	6米	塔臂6米臂节
	9米	塔臂9米臂节

Note

Symbol	Boom length	Remarks
	6m	Luffing jib top
	6m	Luffing jib foot
	3m	Luffing jib 3m section
	6m	Luffing jib 6m section
	9m	Luffing jib 9m section



标准主臂工况载荷表

Load Chart (Standard boom)

13m-61m 360° 26.2t

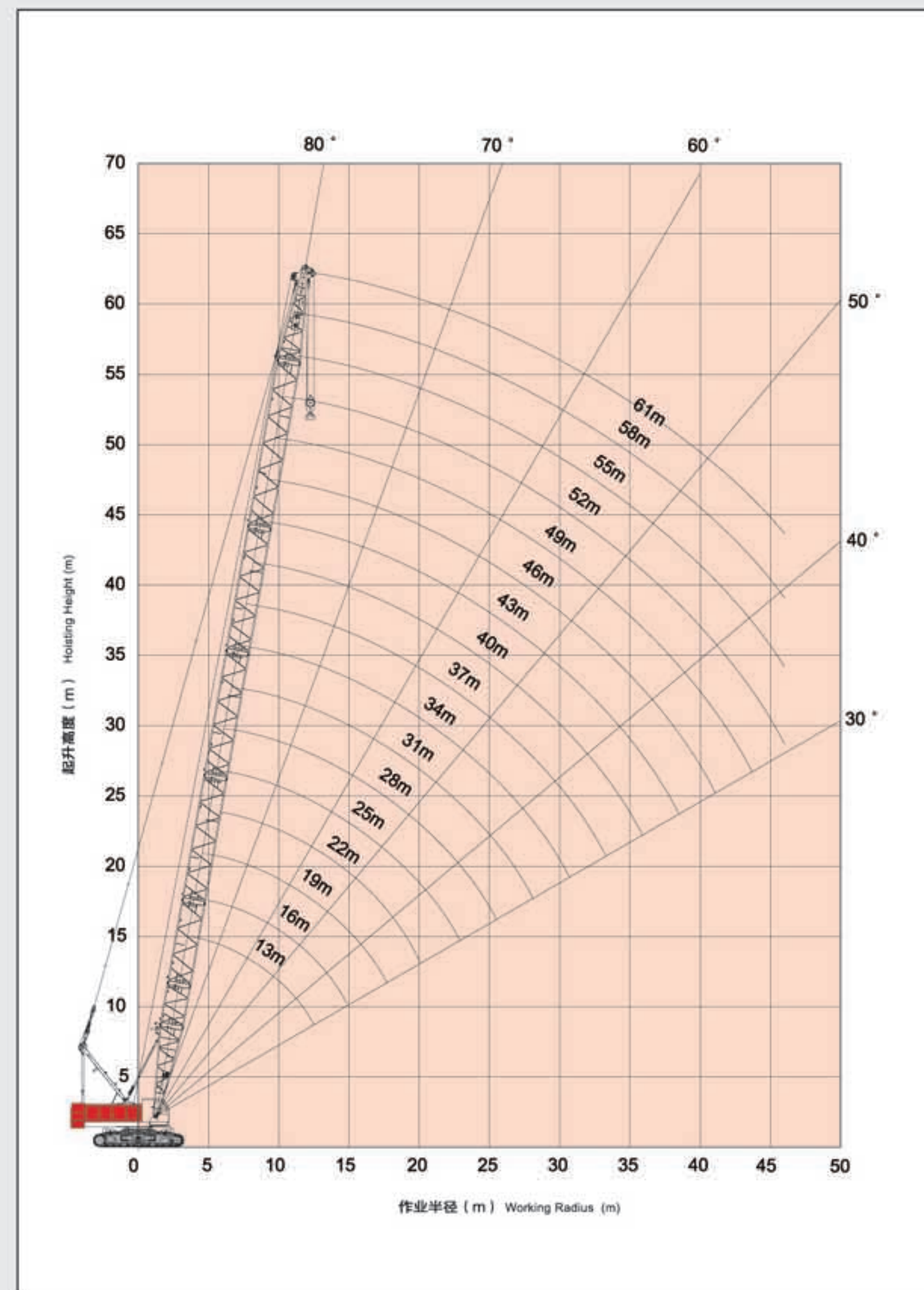
m	13	16	19	22	25	28	31	34	37	m
3	3.9/9.0									3
4	9.0	4.4/83.8	4.9/88.4							4
5	72.9	69.8	67	5.4/57.5	6.0/49.5					5
6	56.5	54.4	52.6	50.8	49.1	6.5/43.2				6
7	45.7	44.5	43.2	41.9	40.6	39.4	7.0/38.2	7.5/34.1		7
8	37.5	37.4	36.6	35.5	34.6	33.6	32.7	31.8	8.0/30.7	8
9	31.8	31.6	31.5	30.8	30	29.3	28.5	27.7	27	9
10	27.5	27.3	27.3	27.1	26.5	25.9	25.2	24.5	23.9	10
12	21.6	21.4	21.3	21.1	21	20.9	20.3	19.8	19.3	12
14	12.7/20.0	17.5	17.4	17.2	17.1	17	16.8	16.5	16.1	14
16		15.3/15.6	14.6	14.4	14.3	14.2	14	13.9	13.7	16
18			17.9/12.6	12.3	12.2	12.1	11.9	11.8	11.7	18
20				10.7	10.6	10.5	10.3	10.2	10.1	20
22				20.5/10.3	9.3	9.2	9	8.9	8.8	22
24					23.1/8.7	8.1	7.9	7.8	7.7	24
26						25.7/7.4	7	6.9	6.8	26
28							6.3	6.2	6.1	28
30							28.3/6.2	5.6	5.4	30
32								30.9/5.3	4.9	32
34									33.5/4.5	34
36										36
38										38
40										40
42										42
44										44
46										46

13m-61m 360° 26.2t

m	40	43	46	49	52	55	58	61	m
3									3
4									4
5									5
6									6
7									7
8	8.6/27.7								8
9	26.2	9.1/25.2	9.6/23						9
10	23.2	22.6	22	10.1/21	10.7/19.3	11.2/17.7	11.7/16.3		10
12	18.8	18.3	17.8	17.3	16.8	16.3	15.8	12.2/15	12
14	15.6	15.2	14.8	14.4	13.9	13.6	13.1	12.7	14
16	13.3	13	12.6	12.2	11.8	11.5	11.1	10.7	16
18	11.5	11.2	10.9	10.5	10.1	9.8	9.5	9.2	18
20	9.9	9.7	9.5	9.1	8.8	8.5	8.2	7.9	20
22	8.6	8.4	8.3	8	7.7	7.5	7.2	6.9	22
24	7.5	7.4	7.3	7.1	6.8	6.6	6.3	6	24
26	6.6	6.5	6.4	6.2	6.1	5.8	5.6	5.3	26
28	5.9	5.8	5.6	5.4	5.3	5.2	4.9	4.7	28
30	5.2	5.1	5	4.8	4.7	4.5	4.4	4.1	30
32	4.7	4.6	4.4	4.2	4.1	4	3.9	3.7	32
34	4.2	4.1	3.9	3.7	3.6	3.5	3.4	3.2	34
36	3.8	3.6	3.5	3.3	3.2	3.1	3	2.8	36
38	36.1/3.7	3.3	3.1	2.9	2.8	2.7	2.6	2.4	38
40		38.7/3.1	2.8	2.6	2.5	2.4	2.2	2.1	40
42			41.3/2.6	2.3	2.2	2.1	1.9	1.8	42
44				43.9/2.0	1.9	1.8	1.6	1.5	44
46					1.6	1.5	1.4	1.2	46

标准主臂工况作业范围

Working Range (Standard Boom)





加长主臂工况载荷表

Load Chart (Runner)



13m-61m



360°

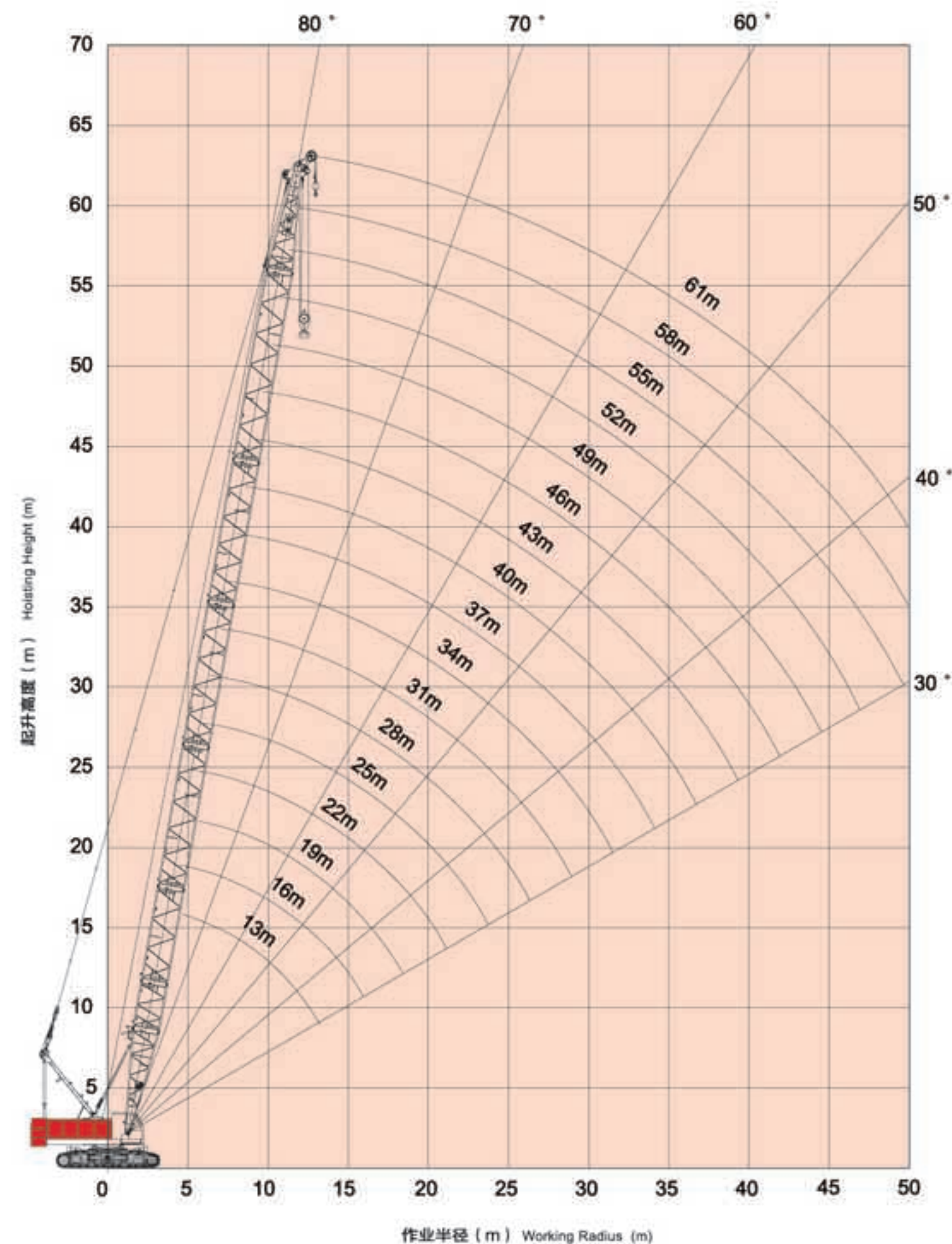


26.2t

m	13	16	19	22	25	28	31	34	37	m
3										3
4	4.2/9.0	4.7/9.0								4
5	9.0	9.0	5.2/9.0	5.7/9.0						5
6	9.0	9.0	9.0	9.0	6.3/9.0	6.8/9.0				6
7	9.0	9.0	9.0	9.0	9.0	9.0	7.3/9.0	7.8/9.0		7
8	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.4/9.0	8
9	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9
10	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	10
11	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	11
12	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12
14	12.9/9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	14
16		15.5/9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	16
18			9.0	9.0	9.0	9.0	9.0	9.0	9.0	18
20				9.0	9.0	9.0	9.0	9.0	9.0	20
22				20.6/9.0	8.8	8.7	8.5	8.4	8.3	22
24					23.2/8.1	7.6	7.4	7.3	7.2	24
26						25.8/6.7	6.8	6.5	6.3	26
28							5.8	5.7	5.6	28
30							28.4/5.7	5.1	4.9	30
32								31.0/4.8	4.4	32
34									33.6/4.0	34
36										36
38										38
40										40
42										42
44										44
46										46
m	40	43	46	49	52	55	58	61		m
4										4
5										5
6										6
7										7
8	8.9/9.0									8
9	9.0	9.4/9.0	9.9/9.0							9
10	9.0	9.0	9.0	10.4/9.0	11.0/9.0					10
11	9.0	9.0	9.0	9.0	9.0	11.5/9.0				11
12	9.0	9.0	9.0	9.0	9.0	9.0	12.0/9.0	12.5/9.0		12
14	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0		14
16	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0		16
18	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.7		18
20	9.0	9.0	9.0	8.7	8.9	8.1	8.8	7.5		20
22	8.1	8.0	7.9	7.5	7.8	7.0	6.7	6.4		22
24	7.0	6.9	6.8	6.6	6.9	6.1	5.9	5.6		24
26	6.1	6.0	5.9	5.7	6.1	5.4	5.1	4.8		26
28	5.4	5.3	5.2	5.0	5.3	4.7	4.5	4.2		28
30	4.7	4.6	4.5	4.3	4.7	4.1	3.9	3.7		30
32	4.2	4.1	4.0	3.8	4.1	3.5	3.4	3.2		32
34	3.7	3.6	3.5	3.3	3.6	3.0	2.9	2.8		34
36	3.3	3.2	3.0	2.8	3.2	2.6	2.5	2.3		36
38	36.2/3.2	2.8	2.7	2.5	2.8	2.2	2.1	2.0		38
40		38.8/2.6	2.3	2.1	2.5	1.9	1.8	1.6		40
42			41.4/2.1	1.8	2.2	1.6	1.4	1.3		42
44				1.5	1.9	1.3	1.3	1.0		44
46				44.0/1.5	1.6	1.0	0.9	0.8		46

加长主臂工况作业范围

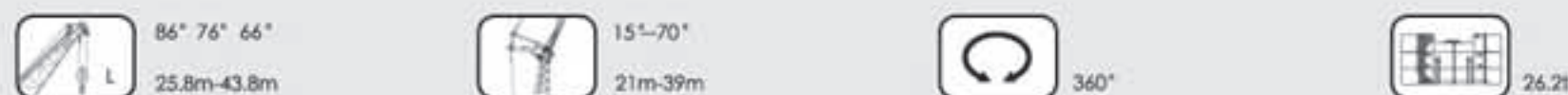
Working Range (Runner)





塔式工况载荷表

Load Chart (Luffing jib)

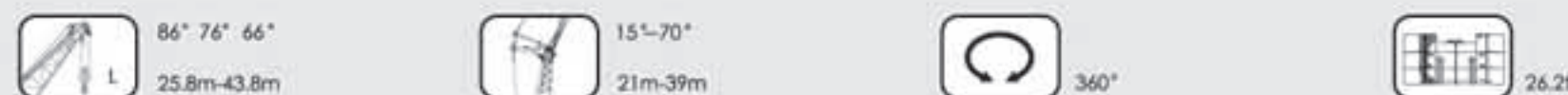


m	25.8												m
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
10													10
12	18.4												12
14	15.8			15.4			15.1						14
16	13.9			13.6			13.2			12.9			16
18	12.4			12.1			11.8			11.5			18
20	11.2	10.2		10.9			10.6			10.3			20
22	10.2	9.3		9.9	9		9.7	8.8		9.4			22
24	9.5	8.5		9.1	8.3		8.9	8		8.6	7.8		24
26		7.9		8.4	7.6		8.2	7.4		7.9	7.2		26
28		7.3	6.6		7.1		7.6	6.9		7.4	6.6		28
30			6.1		6.6	6		6.4	5.8	6.9	6.2		30
32			5.6				5.5	6	5.4	6.5	5.8	5.2	32
34						5.1		5.6	5		5.4	4.9	34
36									4.7		5.1	4.6	36
38									4.4			4.2	38
40												4	40
42													42
44													44
46													46
48													48
50													50

m	25.8												m
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
10													10
12													12
14													14
16	12.6												16
18	11.2			10.9			9.8						18
20	10.1			9.8			9.1						20
22	9.2			8.9			8.4						22
24	8.4			8.2			7.8						24
26	7.7	7		7.5			7.3						26
28	7.2	6.4		7	6.3		6.7	6					28
30	6.7	6		6.5	5.8		6.3	5.6					30
32	6.2	5.6		6	5.4		5.8	5.2					32
34	5.9	5.2	4.7	5.7	5.1		5.4	4.9					34
36		4.9	4.4	5.3	4.7	4.2	5.1	4.5					36
38		4.6	4.1	5.1	4.5	4	4.7	4.3	3.8				38
40		4.3	3.9		4.2	3.7	4.4	4	3.5				40
42			3.6		4	3.5		3.8	3.3				42
44			3.4			3.3		3.6	3.2				44
46						3.1			3				46
48									2.8				48
50									2.6				50

塔式工况载荷表

Load Chart (Luffing jib)



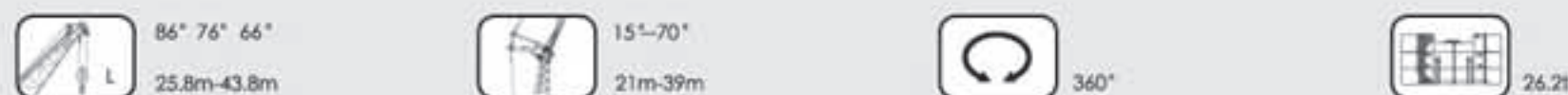
m	28.8												m
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
10													10
12	17.9												12
14	15.4			15			14.7						14
16	13.6			13.2			12.9			12.6			16
18	12.1			11.8			11.5			11.2			18
20	11	9.9		10.6			10.4			10.1			20
22	10	9		9.7	8.7		9.4			9.2			22
24	9.2	8.2		8.9	8		8.7	7.7		8.4			24
26		7.6		8.3	7.3		8	7.1		7.7	6.9		26
28		7.1	6.3		6.8		7.4	6.6		7.2	6.4		28
30			5.9		6.4	5.6		7	6.1		6.7	5.9	30
32			5.4		5.9	5.3		5.8	5.1	6.3	5.5	4.6	32
34						4.9		5.4	4.8		5.2	4.3	34
36						4.6			4.5		4.9	4	36
38								4.2				3.8	38
40												3.5	40
42													42
44													44
46													46
48													48
50													50

m	28.8												m
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
10													10
12													12
14													14
16	12.2												16
18	10.9			10.6			9.8			9.8			18
20	9.8			9.6			9.1			9.1			20
22	8.9			8.7			8.4			8.4			22
24	8.2			8			7.7			7.7			24
26	7.5	6.7		7.3			7.1			7.1			26
28	7	6.2		6.8	6		6.6			6.6			28
30	6.5	5.7		6.3	5.6		6.1	5.3		6.1	5.3		30
32	6.1	5.3		5.9	5.2		5.7	5		5.7	5		32
34	5.7	5		5.5	4.8		5.3	4.6		5.3	4.6		34
36		4.7	4.1	5.2	4.5		5	4.3		5	4.3		36
38		4.4	3.9	4.9	4.3	3.7	4.7	4.1		4.7	4.1		38
40		4.2	3.6		4	3.5	4.5	3.8	3.3	4.5	3.8	3.3	40
42			3.4		3.8	3.3		3.6	3.1		3.6	3.1	42
44			3.2			3.1		3.4	2.9		3.4	2.9	44
46						3		3.3	2.8		3.3	2.8	46
48						2.8			2.6			2.6	48
50									2.5			2.5	50



塔式工况载荷表

Load Chart (Luffing jib)

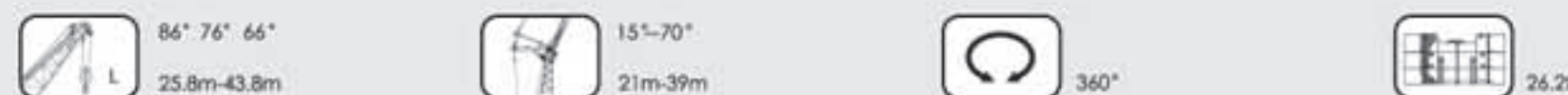


 m	31.8												 m
	21			24			27			30			
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
10													10
12	17.4												12
14	15			14.6			14.3						14
16	13.2			12.9			12.6			12.2			16
18	11.8			11.5			11.2			10.9			18
20	10.7			10.4			10.1			9.8			20
22	9.6	8.6		9.5	8.3		9.2			8.9			22
24	9	7.9		8.7	7.6		8.5	7.4		8.2			24
26		7.3		8.1	7		7.8	6.8		7.6	6.6		26
28		6.8			6.5		7.3	6.3		7	6.1		28
30			5.5		6.1		6.8	5.9		6.6	5.7		30
32			5.2		5.7	4.9		5.5		6.2	5.3		32
34			4.8			4.6		5.2	4.4		4.9		34
36						4.4			4.2		4.7	4	36
38						4.1			3.9		4.4	3.7	38
40									3.7			3.5	40
42												3.3	42
44													44
46													46
48													48
50													50
52													52

 m	31.8												 m
	33			36			39						
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
10													10
12													12
14													14
16	11.9												16
18	10.6			10.3			9.9						18
20	9.6			9.3			9.1						20
22	8.7			8.5			8.2						22
24	8			7.8			7.5						24
26	7.4			7.1			6.9						26
28	6.8	5.9		6.6	5.7		6.4						28
30	6.3	5.5		6.2	5.3		5.9	5.1					30
32	5.9	5.1		5.7	4.9		5.5	4.7					32
34	5.6	4.8		5.4	4.6		5.2	4.4					34
36	5.3	4.5		5.1	4.3		4.9	4.1					36
38		4.2	3.6	4.8	4.1		4.6	3.9					38
40		4	3.4		3.8	3.2	4.4	3.6					40
42			3.2		3.6	3		3.4	2.8				42
44			3		3.5	2.8		3.3	2.7				44
46			2.9			2.7		3.1	2.5				46
48						2.6			2.4				48
50									2.3				50
52									2.2				52

塔式工况载荷表

Load Chart (Luffing jib)



	34.8												
	21			24			27			30			
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
10													10
12	16.9												12
14	14.6			14.2			13.9						14
16	12.9			12.5			12.2			11.9			16
18	11.5			11.2			10.9			10.6			18
20	10.4			10.1			9.9			9.6			20
22	9.5	8.3		9.2			9			8.7			22
24	8.8	7.6		8.5	7.3		8.2			8			24
26		7		7.9	6.7		7.6	6.5		7.4	6.3		26
28		6.5			6.2		7.1	6		6.8	5.8		28
30		6.1	5.2		5.8		6.7	5.6		6.4	5.4		30
32			4.8		5.5	4.6		5.3		6	5		32
34			4.5			4.3		4.9	4.1		4.7		34
36			4.3			4.1		4.7	3.9		4.4	3.7	36
38						3.8			3.7		4.2	3.5	38
40									3.5			3.3	40
42									3.3			3.1	42
44												2.9	44
46													46
48													48
50													50
52													52

	34.8												
	33			36			39						
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
10													10
12													12
14													14
16	11.6												16
18	10.3			10.1			9.8			9.8			18
20	9.3			9.1			8.8			8.8			20
22	8.5			8.2			8			8			22
24	7.8			7.6			7.3			7.3			24
26	7.2			7			6.7			6.7			26
28	6.6	5.6		6.4			6.2			6.2			28
30	6.2	5.2		6	5		5.8			5.8			30
32	5.8	4.9		5.6	4.7		5.4	4.5		5.4	4.5		32
34	5.4	4.5		5.3	4.4		5	4.2		5	4.2		34
36	5.2	4.3		4.9	4.1		4.7	3.9		4.7	3.9		36
38		4	3.3	4.7	3.9		4.5	3.7		4.5	3.7		38
40		3.8	3.1		3.6	2.9	4.2	3.4		4.2	3.4		40
42		3.6	2.9		3.4	2.8	4	3.2	2.6	4	3.2	2.6	42
44			2.8		3.3	2.6		3.1	2.4		3.1	2.4	44
46			2.6			2.5		2.9	2.3		2.9	2.3	46
48						2.3		2.8	2.2		2.8	2.2	48
50						2.2			2			2	50
52									1.9			1.9	52



塔式工况载荷表

Load Chart (Luffing jib)



86° 76° 66°
25.8m-43.8m



15°-70°
21m-39m



360°



26.2t

 m	37.8												 m
	21			24			27			30			
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
14	14.2			13.8									14
16	12.5			12.2			11.9			11.5			16
18	11.2			10.9			10.6			10.3			18
20	10.2			9.9			9.6			9.3			20
22	9.3	7.9		9			8.7			8.5			22
24	8.6	7.2		8.3	6.9		8			7.8			24
26		6.6		7.7	6.4		7.4	6.2		7.2			26
28		6.2			5.9		6.9	5.7		6.7	5.5		28
30		5.8			5.5		6.5	5.3		6.2	5.1		30
32			4.5		5.2			5		5.8	4.8		32
34			4.2		4.9	4		4.7			4.5		34
36			3.9			3.7		4.4	3.6		4.2		36
38						3.5			3.3		4	3.1	38
40						3.3				3.2	3.8	3	40
42										3		2.8	42
44												2.6	44
46												2.5	46
48													48
50													50
52													52
54													54

 m	37.8												 m
	33			36			39						
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
14													14
16													16
18	10			9.8									18
20	9.1			8.8			8.5						20
22	8.2			8			7.7						22
24	7.5			7.3			7.1						24
26	7			6.8			6.5						26
28	6.5	5.3		6.3			6						28
30	6	4.9		5.8	4.7		5.6						30
32	5.6	4.6		5.4	4.4		5.2	4.2					32
34	5.3	4.3		5.1	4.1		4.9	3.9					34
36	5	4		4.8	3.8		4.6	3.7					36
38		3.8		4.5	3.6		4.3	3.4					38
40		3.6	2.8		3.4		4.1	3.2					40
42		3.4	2.6		3.2	2.5	3.9	3					42
44			2.5		3.1	2.3		2.9	2.1				44
46			2.3			2.2		2.7	2				46
48			2.2			2.1		2.6	1.9				48
50						2			1.8				50
52						1.9			1.7				52
54									1.6				54

塔式工况载荷表

Load Chart (Luffing jib)



86° 76° 66°
25.8m-43.8m



15°-70°
21m-39m



360°



26.2t

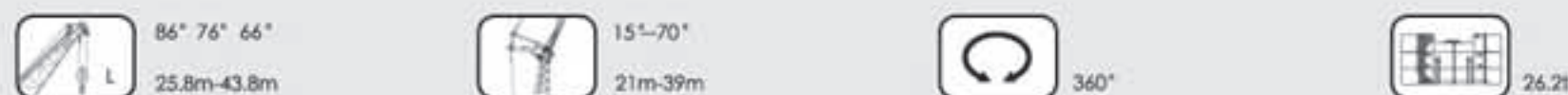
 m	40.8												 m
	21			24			27			30			
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
14	13.8			13.4									14
16	12.2			11.9			11.5			11.2			16
18	10.9			10.6			10.3			10			18
20	9.9			9.6			9.3			9			20
22	9.1			8.8			8.5			8.2			22
24	8.4	6.9		8.1			7.8			7.6			24
26		6.3		7.5	6.1		7.2	5.9		7			26
28		5.9		7	5.6		6.7	5.4		6.5	5.2		28
30		5.5			5.3		6.3	5.1		6	4.8		30
32		5.2			4.9			4.7		5.7	4.5		32
34			3.9		4.6			4.4			4.2		34
36			3.6			3.4		4.2			4		36
38			3.4			3.2			3.1		3.7	2.9	38
40						3			2.9		3.5	2.7	40
42									2.7			2.5	42
44									2.6			2.4	44
46												2.3	46
48													48
50													50
52													52
54													54
56													56

 m	40.8												 m
	33			36			39						
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
14													14
16													16
18	9.7			9.5									18
20	8.8			8.5			8.3						20
22	8			7.8			7.5						22
24	7.3			7.1			6.9						24
26	6.8			6.6			6.3						26
28	6.3			6.1			5.9						28
30	5.8	4.7		5.7			5.4						30
32	5.5	4.3		5.3	4.2		5.1	3.9					32
34	5.1	4		5	3.9		4.7	3.7					34
36	4.9	3.8		4.7	3.6		4.5	3.4					36
38		3.6		4.4	3.4		4.2	3.2					38
40		3.4	2.5		3.2		4	3					40
42		3.2	2.4		3	2.2	3.8	2.8					42
44			2.2		2.9	2.1		2.7	1.9				44
46			2.1		2.7	1.9		2.5	1.8				46
48			2			1.8		2.4	1.7				48
50			1.9			1.7			1.6				50
52						1.6			1.5				52
54									1.4				54
56									1.3				56



塔式工况载荷表

Load Chart (Luffing jib)



 m	43.8												 m
	21			24			27			30			
	86°	76°	66°	86°	76°	66°	86°	76°	66°	86°	76°	66°	
14	13.4			13									14
16	11.9			11.5			11.2			10.8			16
18	10.6			10.3			10			9.7			18
20	9.6			9.3			9.1			8.8			20
22	8.8			8.5			8.3			8			22
24	8.1	6.5		7.8			7.6			7.3			24
26		6		7.3	5.8		7			6.8			26
28		5.6		6.8	5.3		6.5	5.1		6.3	4.9		28
30		5.2			5		6.1	4.8		5.9	4.6		30
32		4.9			4.7			4.5		5.5	4.3		32
34			3.5		4.4			4.2		5.2	4		34
36			3.3			3.1		3.9			3.7		36
38			3.1			2.9		3.7	2.8		3.5		38
40			3			2.8			2.6		3.3	2.4	40
42						2.6			2.4			2.2	42
44									2.3			2.1	44
46												2	46
48												1.9	48
50													50
52													52
54													54
56													56

 m	43.8												 m
	33			36			39						
	86°	76°	66°	86°	76°	66°	86°	76°	66°				
14													14
16													16
18	9.4			9.2									18
20	8.5			8.3			8						20
22	7.8			7.5			7.3						22
24	7.1			6.9			6.7						24
26	6.6			6.4			6.1						26
28	6.1			5.9			5.7						28
30	5.7	4.4		5.5			5.3						30
32	5.3	4.1		5.1	3.9		4.9						32
34	5	3.8		4.8	3.6		4.6	3.4					34
36	4.7	3.6		4.5	3.4		4.3	3.2					36
38		3.3		4.3	3.2		4.1	3					38
40		3.2			3		3.8	2.8					40
42		3	2.1		2.8		3.7	2.6					42
44		2.8	2		2.7	1.8		2.5					44
46			1.8		2.5	1.7		2.3	1.5				46
48			1.7			1.6		2.2	1.4				48
50			1.6			1.5		2.1	1.3				50
52						1.4			1.2				52
54						1.3			1.1				54
56									1.1				56

载荷表说明

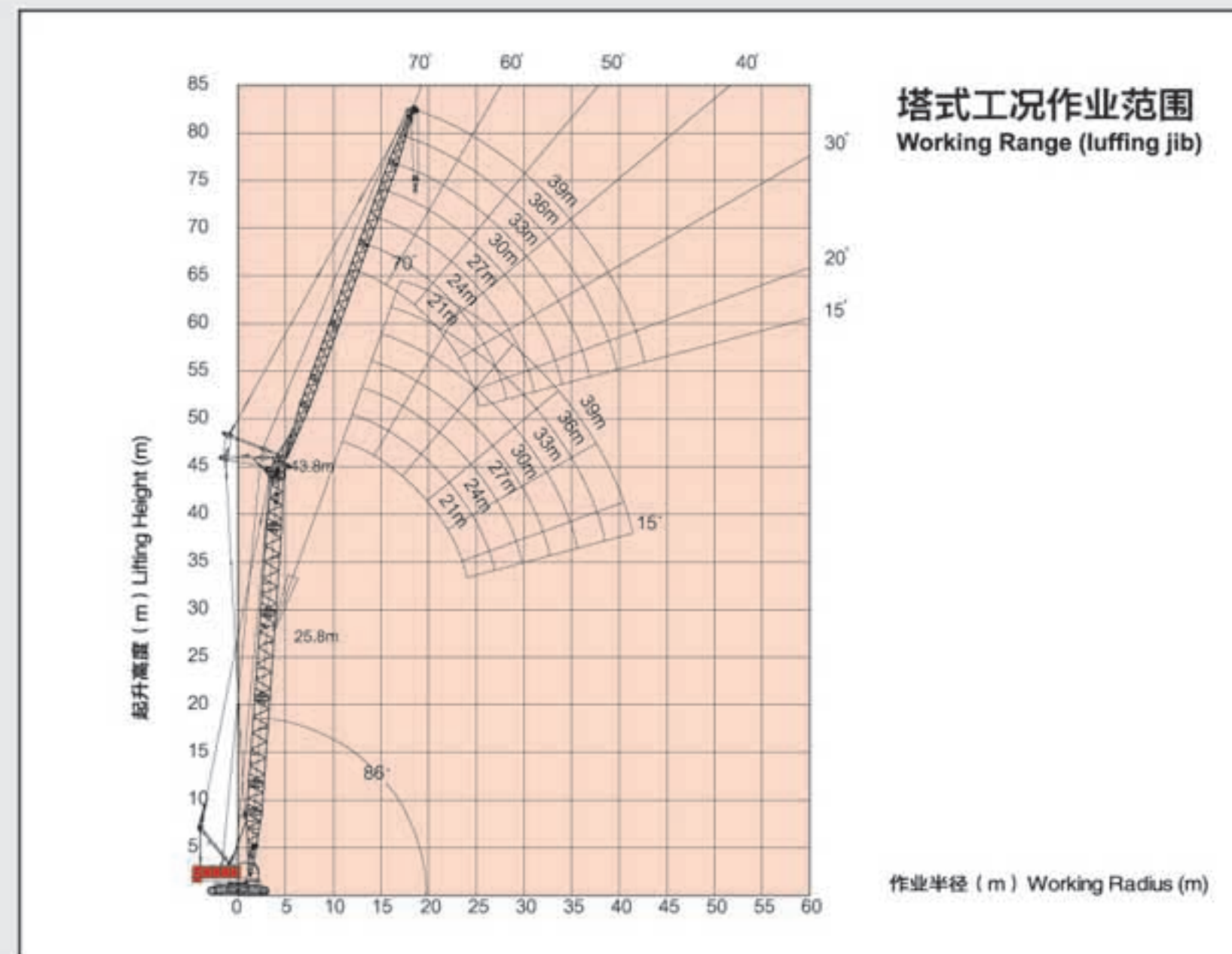
Notes for Load Chart

说明

1. 本起重机符合 GB3811 标准, 同时又满足 ISO 4302, ISO 4305 标准。
2. 载荷表所表示的额定总载荷值为水平坚硬地面上, 理想作业条件的最大允许值。
3. 载荷表所示的值以吨为单位, 并基于倾翻力矩 78% 以内的值及移动式起重机结构标准所确定的前方稳定度在 1.15 以内。
4. 载荷表所示的值基于平衡负载而计算, 不包括如突然停止的冲击负载, 地表状况, 风力荷载及操作速度等影响。如在此条件下, 驾驶员必须进行减载作业。同时, 载荷表中的值还要扣除如吊钩, 吊具等的自重。
5. 可安装加长臂的主臂长度为 13~61m。
6. 塔式工况时, 主臂长度为 25.8~43.8m, 副臂长度为 21~39m。
7. 载荷表中 () 中数据为实际作业半径下的载荷。
8. 平衡重质量为 26.2t。
9. 侧面时的稳定值最小。

Notes

1. Ratings according to GB3811, ISO 4302 and ISO 4305.
2. The rated load in the table is the maximum allowed value when the crane works on the level and firm ground and under the ideal conditions.
3. The unit in the table is ton and the rated Lifting capacity is 75% of tipping load. The front stability is within 1.15 as specified in the standard of the structure of mobile crane.
4. The values in the table are calculated on the stable load, not including impacting load, the hard condition of ground and operating speed. So the driver should reduce the corresponding load from the capacity ratings, the weight of hook and slings should also be deducted from the capacity ratings.
Weight of hook block: 90T hook block.....1.28T, 50T hook block.....0.685T, 30T hook block.....0.52T, 11T hook block.....0.282T
5. When mounted with runner, length of boom is from 13~61m.
6. When mounted with luffing jib, boom length is 25.8~43.8m. Length of luffing jib is 21~39m.
7. The values in () in load chart is the load based on the actual working radius.
8. The weight of counterweight is 26.2t
9. The stability is weak at side.

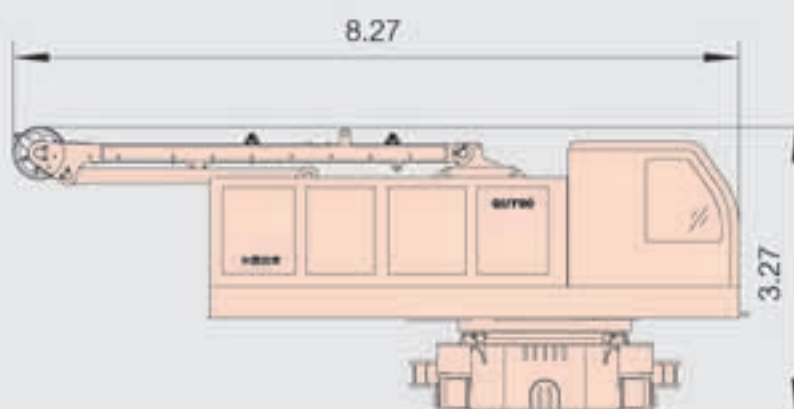




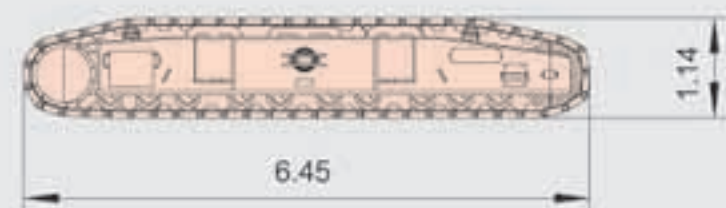
主要零部件运输尺寸

Dimensions for Transportation

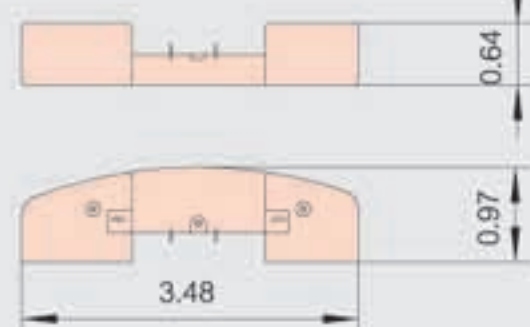
尺寸单位: m Unit: m



本体(不含配重)	x1	Carbody(not including counterweight)	x1
长	8.27m	Length	8.27m
宽	3.28m	Width	3.28m
高	3.27m	Height	3.27m
重量	28322Kg	Weight	28322Kg



履带总成	x2	Crawler assy	x2
长	6.45m	Length	6.45m
宽	0.86m	Width	0.86m
高	1.14m	Height	1.14m
重量	11000Kg	Weight	11000Kg



配重 A	x1	Counterweight A	x1
长	3.48m	Length	3.48m
宽	0.97m	Width	0.97m
高	0.64m	Height	0.64m
重量	9445Kg	Weight	9445Kg



配重 B	x1	Counterweight B	x1
长	3.48m	Length	3.48m
宽	0.97m	Width	0.97m
高	0.55m	Height	0.55m
重量	9320Kg	Weight	9320Kg



配重 C	x1	Counterweight C	x1
长	3.48m	Length	3.48m
宽	0.97m	Width	0.97m
高	0.55m	Height	0.55m
重量	8378Kg	Weight	8378Kg

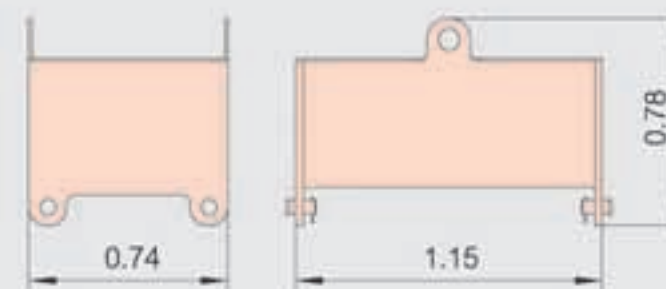


配重 D	x1	Counterweight D	x1
长	2.67m	Length	2.67m
宽	0.83m	Width	0.83m
高	0.92m	Height	0.92m
重量	4862Kg	Weight	4862Kg

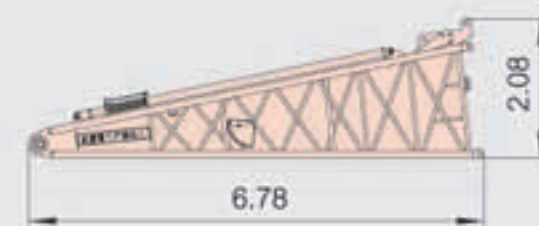
主要零部件运输尺寸

Dimensions for Transportation

尺寸单位: m Unit: m



压重	x1	Central ballast	x1
长	1.15m	Length	1.15m
宽	0.74m	Width	0.74m
高	0.78m	Height	0.78m
重量	2006Kg	Weight	2006Kg



基础臂节	x1	Boom foot	x1
长	6.78m	Length	6.78m
宽	1.72m	Width	1.72m
高	2.08m	Height	2.08m
重量	1390Kg	Weight	1390Kg



顶部臂节	x1	Boom top	x1
长	7.12m	Length	7.12m
宽	1.72m	Width	1.72m
高	1.83m	Height	1.83m
重量	1815Kg	Weight	1815Kg



3米臂节	x1	3m section	x1
长	3.14m	Length	3.14m
宽	1.72m	Width	1.72m
高	1.82m	Height	1.82m
重量	595Kg	Weight	595Kg



6米臂节	x1	6m section	x1
长	6.14m	Length	6.14m
宽	1.72m	Width	1.72m
高	1.82m	Height	1.82m
重量	890Kg	Weight	890Kg



主要零部件运输尺寸

Dimensions for Transportation

尺寸单位: m Unit: m



9米臂节	x3
长	9.14m
宽	1.72m
高	1.82m
重量	1150Kg

9m section	x3
Length	9.14m
Width	1.72m
Height	1.82m
Weight	1150Kg



12米臂节	x1
长	12.14m
宽	1.72m
高	1.82m
重量	1435Kg

12m section	x1
Length	12.14m
Width	1.72m
Height	1.82m
Weight	1435Kg



塔臂基础臂	x1
长	7.04m
宽	1.20m
高	1.97m
重量	3128Kg

luffing jib foot	x1
Length	7.04m
Width	1.20m
Height	1.97m
Weight	3128Kg



塔臂顶部臂节	x1
长	6.43m
宽	1.20m
高	1.25m
重量	751Kg

luffing jib top	x1
Length	6.43m
Width	1.20m
Height	1.25m
Weight	751Kg



塔臂3米臂节	x1
长	3.10m
宽	1.20m
高	1.18m
重量	231Kg

luffing jib 3m section	x1
Length	3.10m
Width	1.20m
Height	1.18m
Weight	231Kg

主要零部件运输尺寸

Dimensions for Transportation

尺寸单位: m Unit: m



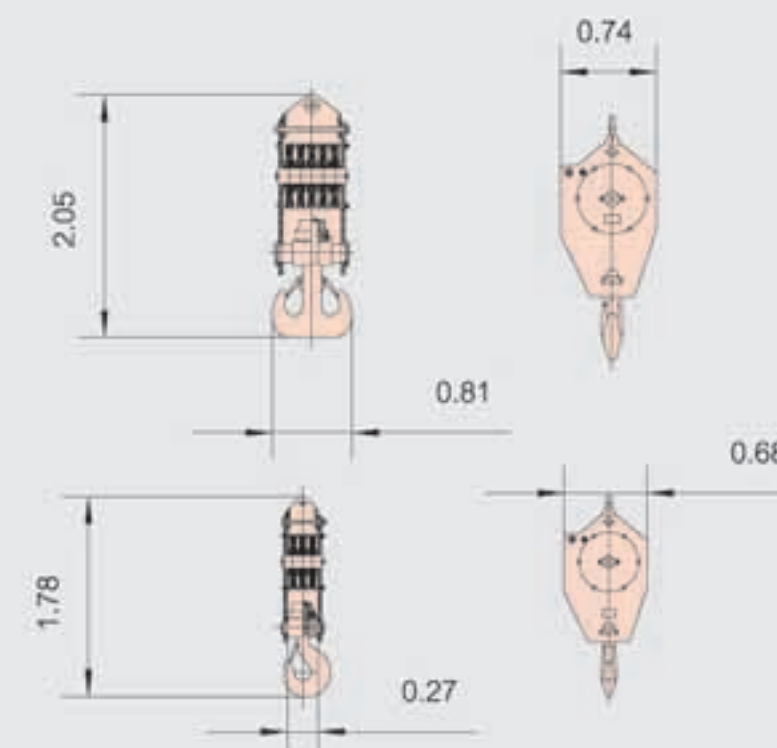
塔臂6米臂节	x1
长	6.10m
宽	1.20m
高	1.18m
重量	398Kg

Luffing jib 6m section	x1
Length	6.10m
Width	1.20m
Height	1.18m
Weight	398Kg



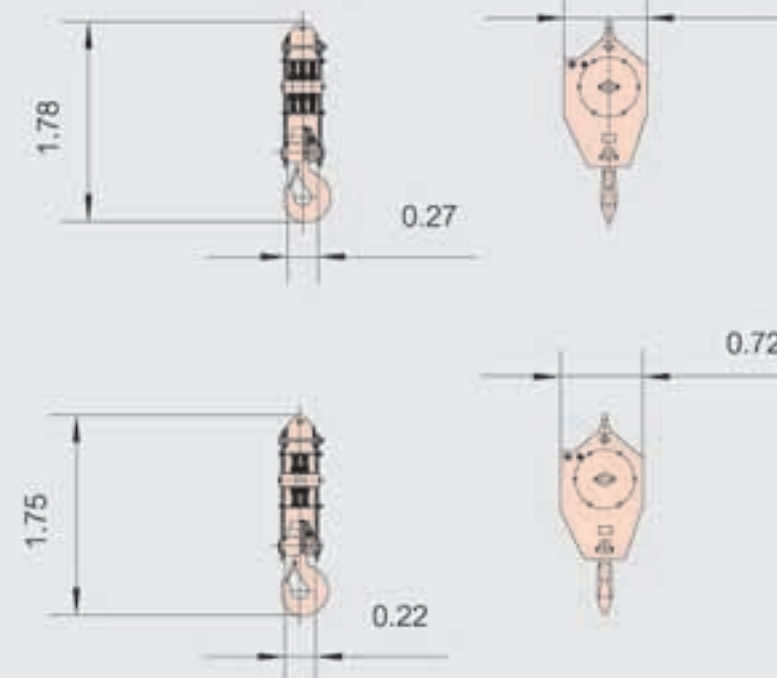
塔臂9米臂节	x2
长	9.10m
宽	1.20m
高	1.18m
重量	555Kg

Luffing jib 9m section	x2
Length	9.10m
Width	1.20m
Height	1.18m
Weight	555Kg



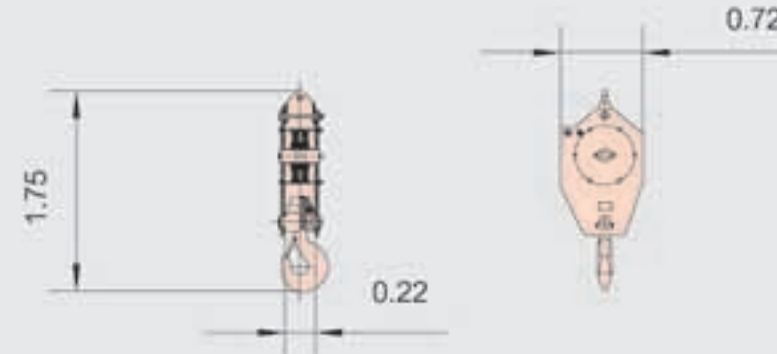
90吨吊钩	x1
长	2.05m
宽	0.74m
高	0.81m
重量	1280Kg

90t Hook	x1
Length	2.05m
Width	0.74m
Height	0.81m
Weight	1280Kg



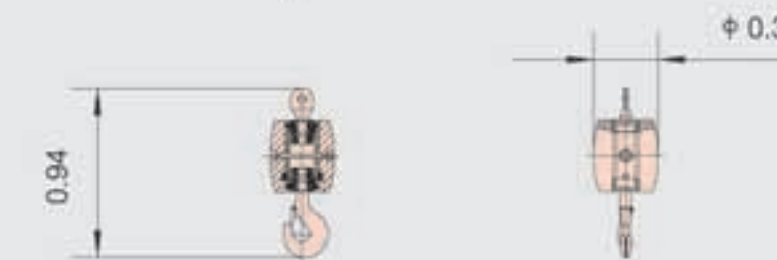
50吨吊钩	x1
长	1.78m
宽	0.68m
高	0.27m
重量	685Kg

50t Hook	x1
Length	1.78m
Width	0.68m
Height	0.27m
Weight	685Kg



30吨吊钩	x1
长	1.75m
宽	0.72m
高	0.22m
重量	520Kg

30t Hook	x1
Length	1.75m
Width	0.72m
Height	0.22m
Weight	520Kg



11吨吊钩	x1
长	0.94m
宽	0.36m
高	0.36m
重量	282Kg

11t Hook	x1
Length	0.94m
Width	0.36m
Height	0.36m
Weight	282Kg